APPENDIX TO ABSTRACT OF CASES

IN WHICH A PORTION OF THE

CYLINDER OF THE INTESTINAL CANAL,

COMPRISING ALL ITS COATS, HAS BEEN DISCHARGED BY STOOL,

WITHOUT THE CONTINUITY OF THE CANAL HAVING BEEN DESTROYED.

By WILLIAM THOMSON, M. D.

Fellow of the Royal Colleges of Physicians and Surgeons.

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In a communication published in the 125th Number of this Journal, I gave an abstract of thirty-five cases in which a portion of the cylinder of the intestinal canal had become detached and been discharged by stool; and subjoined such general conclusions as an analysis of these cases at the time suggested to me. I am induced to revert to the subject for the purpose of directing the attention of the profession, in a more particular manner, to the occurrence of this accident in two classes of cases,—viz. cases of Hernia and cases of Dysentery; and I shall avail myself of the opportunity to consider more fully the natural processes by which the detachment and discharge of a portion of bowel may be effected. At the same time I have thought it desirable to bring together all the analogous cases which have come to my knowledge since the publication of the paper alluded to; and to communicate some additional information

since obtained, relative to some of the cases there noticed; those, namely, numbered 11, 14, and 33.

The only information I possessed at that time relative to case 11, was derived from the description given by Dr Baillie* of some preparations in Dr Hunter's collection. On examining the catalogue of the anatomical portion of Dr Hunter's Museum, (now, as is well known, deposited in Glasgow,) the only preparations that could be supposed to answer to Dr Baillie's description seemed to be those marked R. 43, 44, 45, which are entered as follows. "Portions of diseased colon from a publican in Piccadilly. 44 and 45 came away in a dysentery he had, and recovered; 43 is the colon two years afterwards when he died. 44 and 45 seem to be portions of the internal coat ulcerated off. 43, however, does not explain this exfoliation, but appears ragged and ulcerated, with stricture at one place." If I be right in supposing these to be the preparations referred to by Dr Baillie, then case 11 obviously belongs to the series of cases in which an opportunity had occurred of examining the state of the parts after death; and ought to be added to those in which the disease originated in dysentery, to those in which the necrosed bowel came away in separate portions, and to those in which the process of recovery was attended with a certain degree of stricture.

Of case 14, originally recorded by Dr Legoupil, I was able in my former paper to give only a very imperfect account. I have since met with the following more circumstantial narrative.†

L. B. 4 years of age, of feeble constitution, but lively and healthy, was seized with small-pox on the 23d July 1820, and took no medicine till the 4th of August, when Dr Legoupil was summoned, in consequence of the child having, for some days, complained much of violent colicky pains in the belly, accompanied by much discharge of blood *per anum*, but no vomiting or hiccup. The abdomen was slightly distended, the right iliac region being more tender and depressed than the rest. The breathing was natural, the pulse strong and quickened. The pustules were beginning to dry off, and there was a disagreeable putrid smell about the child's bed. The same day there appeared at the anus a purplish red tumour of the size of a pullet's egg, from the surface of which some drops of blood issued. It was supposed to be a prolapsus of the mucous membrane of the rectum, and fomentations were applied. On the 5th, the tumour exhaled a putrid odour, the stools passing in

* In his account of a singular disease in the great intestines, published in the 2d Volume of the Medical and Chirurgical Transactions.

† Johnson's Medico-Chirurg. Review for March 1824, iv. 932.

a liquid state. On the 6th, 7th, and 8th, the same state continued; but on the 9th, the swelling burst forth, drawing after it a cylindrical body resembling a piece of small intestine, and about six inches in length. This substance was carefully examined by Drs Legoupil and Delisle, and afterwards sent to the Societé de Mèdecine de Paris, where it was recognized to be the entire of the cœcum, and about six inches of the ileum. The child recovered and did well.

With regard to the 33d case, I was unable in my former communication to give any farther information than was to be found in the catalogue of preparations contained in the museum of St Bartholomew's Hospital, and which consisted rather of a description of the preparation, than of an account of the case. My friend Mr Benjamin Joseph Bell, however, on a recent visit to London, procured for me notes of the case, which enable me to state the following particulars respecting it.

The patient was a woman 48 years of age, of spare habit, and habitually costive. She was attacked on Friday, 23d December, with severe pain in the hepatic region, which continued, with constipation, till the 5th day, when she was first seen. She then complained of great pain and soreness over the whole abdomen, with incessant vomiting and great prostration of strength, her countenance anxious, pulse quick and small, tongue with white edges, dry and red in the centre. Purgative medicines were administered. She had a restless night; no evacuation. On the 6th day the pain continued. She was bled, had more purgative medicines and an enema. On the 7th day the symptoms continued, with stercoraceous vomiting. Saline effervescing medicine with salts and opium was administered, and her bowels were relieved for the first time. On the 8th day she was somewhat easier, but the stercoraceous vomiting still continued. A blister was applied to the pit of the stomach, and the effervescing medicine continued. The bowels were twice opened. On the 9th day the vomiting had nearly ceased. No alvine evacuations occurred from the 8th to the 12th day, when the bowels were moved. On the 15th, the vital energies appeared sinking, and she was ordered to have wine and mild nourishment. She rallied and continued to improve till the 19th day, when the surgeon was informed by the nurse that the patient's "seat" had come down. On examination, a large portion of intestine was found protruding at the anus. It had the appearance of ileum, and was withdrawn. The length was 4½ inches. She had daily evacuations, assisted by enemata, till her death, which occurred on the 29th day.

On opening the abdomen, the left descending colon was im-

mediately exposed, which, with the small intestines, was much distended by *flatus*. On raising the omentum and transverse arch of the colon, an ulcerated aperture was brought into view, through which a quantity of fecal matter had escaped into the peritoneal cavity. In several places of the colon there were abrasions of the mucous membrane. On measuring the small intestines, they were found to be ten feet in length, and free from disease. The *cæcum*, with the last portion of the small and first part of the large, intestines, presented a confused mass connected with the abdominal parietes by adhesive inflammation. On laying open the *cæcum*, an ulcerated opening appeared at the situation of the valve of the ileum, (a portion of which was remaining,) through which the piece of intestine had passed, with the upper part of the ileum adherent to the margin of the opening.

The cases which I have now for the first time to bring forward, I shall arrange in the same order as those narrated in the previous communication. They are the following.

Series I. Cases in which death had not taken place at the period of their being recorded.

36. (16 A.) Nic. Guil. Beckers de dolore ilei, ac corporis membranosi per alvum excretione. Ephem. Med. Phys. German. Dec. i. An. iv. and v. Obs. lxviii. p. 56.

37. (16 B.) Sur une portion des gros intestins, extraite par l'anus; par MM. Sebire D. M. et Gautier de St James, maitre en Chirurgie, &c. Journ. de Medec. Chirurg. et Pharm. lxiv. 619.

38. (16 C.) Sœmmering, Translation of Baillie's Morbid Anatomy into German, with notes, Berlin, 1820, p. 122.

Series II. Cases in which death had taken place at the time of their being recorded, but in which no dissection had been made.

39. (20 A.) Intus-susception intestinale suivie de l'excretion, par les selles, d'environ trente pouces d'intestin grêle, et d'une portion de mesentere. Observation de MM. Bouniol et Rigal fils. Revue Medicale, Aout 1823, xi. 476, and in Andral's Anatomie Pathologique, ii.

40. Meckel, Handbuch der Patholog. Anatomie, B. i. Th. i. s. 339.

Series III. Cases in which death had occurred, and a *post mortem* examination been made.

41. (35 A.) Chirurgische Geschichte, &c. von Leb. Ehreg. Schneidern; funft. theil, Chemnitz, 1771. (See Richter's Chirurg. Bibliothek, i.)

42. (35 B.) Case which occurred in the practice of Dr Forbes of Chichester, described by Dr Carswell in the Article Mortification in the Cyclopedia of Practical Medicine. The greater part of the intestine is preserved in the Museum of the Chichester Infirmary.

43. (35 C.) Cayol, as quoted at case 24.

36. A widow, aged 40, complained of a severe ulcerous pain of the right ileum, particularly at the time of going to stool, for which various remedies had been prescribed. She was put upon the use of a mild abstergent decoction, of baths, and of emollient and anodyne injections. These having been diligently employed for eight days, she passed by stool a membranous substance of the length and breadth of the thumb, open and ulcerated at one part but shut at the other, consisting of a triple coat, thin, fleshy, and rugous, and having a great resemblance to the *cæcum*. The discharge of this substance was accompanied with a small quantity of blood, of which there had previously been no trace. After this, she was seized with loss of appetite and constipation of the bowels, which could not be overcome, but on the ninth and following days, the bowels having been spontaneously opened, the appetite returned, and the patient was restored to her former state of health. From the nature of the pain and its seat, and from the structure of the excreted part, the author who relates this case was strongly inclined to believe that the substance discharged was actually the *cæcum*.

37. A man, aged 35, was attacked (13th April) with colic accompanied with fever; he had calls to stool twenty times in the course of the day, and passed clots of blood and mucus. At the time of his being seen, the gripings, which were felt only in the lower part of the umbilical region, had somewhat subsided; the pulse was small, contracted, and frequent; the face was pale, the eyes had a dark areola; and the tongue was covered with a thick yellow matter; the abdomen was tense and painful throughout all its lower part. The attack was regarded as of the nature of bilious dysentery, and treated accordingly. After the remedies had been continued for some days the condition of the patient was much improved, there was no longer blood in the stools, and the fever seemed to cease. The patient now became very irregular in respect of diet. On the evening of the sixteenth day of his disease, (28th April) after having passed several stools, he felt that his fundament had protruded. The surgeon on visiting him next day found that

a portion of intestine half-a foot in length had come out, which was sphacelated, cold, had a yellowish brown coating, and exhaled a cadaverous smell. The free end of this putrid body resembled a soft bladder, the base of which was larger than the part above, and exhibited an aperture into which the whole length of the finger could be introduced. The dejections had taken place for some days involuntarily, and were very fœtid, the pulse was small, the tongue dry, the colour leaden, and the whole of the body cold, but the mental faculties were entire. On the subsequent day he continued much in the same state, though in some respects improved, the pulse being better, and the anus, which had been well fomented with wine, appearing healthy throughout its whole circumference. The whole sphacelated portion exterior to the anus having been cut off, and an incision been made into it, it was found to consist of a fleshy mass, vascular and sarcomatous, and of the size of an egg, which adhered incompletely to a membranous sac. A second portion was then pulled out, and cut off; and, lastly, a third portion was drawn away without tearing, which was found to have no adhesions whatsoever. The patient went to stool and had a satisfactory alvine discharge, and an enema which was administered caused no pain, but brought away a quantity of bilious matter. The patient made a good recovery, and on the 12th of June following, he was as well as possible, with the exception of a slight pain felt in the abdomen after eating.

On making an accurate examination of the substance that had been extracted, after a longitudinal incision had been made throughout its whole extent, the following points were satisfactorily ascertained, 1*st*, That it consisted of a portion of the colon eighteen inches in length, the substance of which was not so much destroyed by the sphacelus, as to prevent its cells from being still distinctly seen, as well as the ligament by which it is attached to the mesentery, throughout its whole length. This portion was inverted like a glove. 2*d*, The cellular and fatty adhesions of the colon were distinctly perceptible, their gray colour not being effaced. 3*d*, The mucous membrane with which that intestine is lined interiorly had become black: And 4*th*, The coats of the intestine, in consequence of the mortification, could easily be separated from one another.

38. Soemmering mentions, that he possesses three preparations of what appear to him to be portions of large intestine, which were discharged by stool, in a case of inguinal hernia, in which the bowel had become gangrenous, adherent and incarcerated, but in which recovery took place. The surface of each part amounts, he says, to about two square inches.

Series II. 39. M. Andral mentions that, in examining a pre-

paration sent to the Academy of Medicine, by MM. Bouniol and Rigal, he satisfied himself that it was a piece of the small intestine about thirty inches in length, accompanied with a portion of mesentery. It had been passed by a man who, after a violent indigestion of twelve days continuance, was affected with the symptoms of internal obstruction, complete suppression of the alvine evacuations, vomiting of stercoral matters, and in whom, in the right iliac region, a very obvious swelling could be felt. After the discharge of this substance, these symptoms suddenly ceased, and the patient had now only a somewhat painful sensation in the right iliac region. Three months afterwards, this man having eat a large quantity of cherries, was seized with peritonitis, and died. Unfortunately no examination was allowed, in which, M. Andral conjectures, there would probably have been found a laceration of the cicatrix, at the part from which the portion of intestine had separated.

40. In the notes of the preparations contained in Professor Meckel's Museum, which I took during a short visit to Halle, in 1825, I find the following entries. "'*Intussuscepta tenuis et crassi pars, dysenteria excreta.*' '*Intestini tenuis portio inversa gangræna ejecta, salva ægri vita.*' One of these is not quite so long as the specimen from Tranent, (Case 10,) and the other is considerably longer."

In his Manual of Pathological Anatomy, Professor Meckel mentions the case of a girl, 17 years of age, in whom, four weeks after the commencement of a fever, which was attended at first with constipation, and afterwards with diarrhœa, there took place the separation of the *cæcum* and *appendicula vermiformis*, and afterwards of the whole transverse and ascending colon, with a portion of the ileum, thirteen inches in length, which had been for a week so far intus-suscepted, that these parts protruded out of the *anus*. The girl, he adds, did not die for four weeks.

Series III. 41. A girl who had been delicate from infancy, was seized when seven years old with fever and severe pains in the abdomen. In the region of the loins was felt a pretty hard swelling, of the size of a goose's egg. Some time afterwards, a violent diarrhœa came on, by which a quantity of purulent matter mixed with blood, and at length a skinny substance, was discharged. This consisted of the whole *cæcum* with the vermiform appendix. The patient upon this became somewhat better; but was at last carried off, by fever, cough, frequent vomiting, and severe diarrhœa, by which purulent matter and undigested food were discharged from the bowels.

On opening the body, all the intestines were found in an un-

natural situation, and there appeared traces of a volvulus having occurred in the *ileum* and *cæcum*; for, says the narrator, the *cæcum* and a part of the *ileum* had entered into the colon, and this invaginated portion had been discharged by stool, without an opening in the intestines being thereby produced, or any stoppage of the contents of the alimentary canal.

42. A woman, aged 31, had been confined to bed by an anomalous chronic affection for many years. In 1826, a portion of intestine came away, and from that time to the year 1829, there were no fewer than eight portions of intestine passed by stool, varying from eleven to thirty-two inches in length, the length of the whole amounting to twelve feet of entire intestine. Each portion was complete in itself, presenting in fact the appearance of healthy intestine that has been allowed to remain for a certain length of time in alcohol. They consisted of the *jejunum* and *ileum*, some of them having their serous, others their mucous surface outwards, on the former of which the blood-vessels, on the latter the *glandulæ agminatæ*, were most conspicuously visible. The patient recovered completely, at least from the immediate consequences of this disease. She died in March 1831, aged 37 years.

On examination after death, the form and dimensions of the intestine at the point where the solution of continuity had taken place, were found to have undergone very little alteration. A slight contraction of the small intestine, and the presence of a thin pearly-coloured false membrane, little more than half a line in breadth, and surrounding it in the form of a zone, were the only external appearances which indicated the original seat of the disease. On the corresponding and internal surface of the intestine there was also seen a narrow, slightly elevated, smooth ridge, covered by mucous tissue, and traversing the whole circumference of the intestine, the walls of which, opposite, were considerably thickened.

The solution of continuity had taken place in the situation of one of the glands of Peyer, and in such a manner, that this gland was divided into two nearly equal portions, one of them terminating in the cicatrix, and the other being situated at the extremity of one of the detached portions of intestine.

43. A man, aged 47, had been troubled for fifteen years with an inguinal hernia on the left side, for which he wore a bandage that did not fit him, but allowed the hernia, which he could easily reduce, to descend. On the 10th of July, on his making a sudden effort, the bandage became displaced, and the tumour quickly became tense, painful, and irreducible. In this state he walked a league and a-half, suffering severe colic; after which, the tumour having acquired a brown hue, he lay for three days affected with colic, hiccough, borborygmus, ster-

coraceous vomiting, and complete suppression of the alvine evacuation. He appeared to be in a sinking condition, and gangrene was supposed to have taken place in the hernial sac. After remaining in this state for two weeks, the bowels were relieved by enemata, and the patient became much better; five or six days afterwards, however, there was an exacerbation of the symptoms, but this also declined. In a month the tumour became less hard, and the skin covering it resumed its natural appearance. During the next four months he was subject to flatulence and colic, was habitually constipated, but every ten or twelve days had an attack of diarrhœa, which weakened him much. From time to time he had stercoraceous vomiting. He eat and drank to excess. About the end of November he was tapped for hydrocele below the original tumour, and the limbs soon afterwards became œdematous; he continued still very much distressed with flatulence. On the 2d of January, about midnight he suddenly sank, and the breathing soon becoming stertorous, he died early on the following day.

On dissection, the hernial sac was found thickened and very dense in texture. On being opened it was found to contain a portion of epiploon, the lower extremity of which was pretty thick, and adhered very firmly to the bottom of the sac. Behind this portion of epiploon was a fold of intestine, from four to five inches in length, the extremity of which, forming an acute angle, adhered also very firmly to the bottom of the hernial sac, and to the portion of epiploon already mentioned.

At the place of this adhesion the intestine was considerably contracted, and as it were strangulated; on opening it cautiously, it appeared that its cavity could scarcely contain the end of the small finger, and on the mucous membrane there could readily be distinguished a cicatrix, the breadth of which varied from half a line to a line and a-half. The broadest part of this cicatrix corresponded to the centre of the adhesion between the intestine and the hernial sac, and opened into a small *cul-de-sac*, that might be compared, in respect of form, to the vermiform appendix of the *cæcum*, four to five lines in length, and immerged between the *parietes* of the sac and the adherent portion of the epiploon. This small *cul de-sac*, which contained a little blackish mucus mixed with fecal matters, appeared at first to be formed by a prolongation of the *parietes* of the intestine; but on accurate examination, it was found that the intestinal coats, instead of being prolonged into its interior, terminated insensibly in the circumference of its aperture, so that the intestine was actually pierced. The *parietes* of the *cul-de-sac* were smooth interiorly, like most old fistulous cavities.

The cicatrix became more and more narrow, the further from the orifice of the *cul-de-sac*, and at last, at the opposite

extremity of the diameter of the intestine, it was quite linear, and slightly prominent. It appeared that at this part the upper end of the intestine was slightly invaginated into the lower, whilst throughout the rest of the cicatrix the two ends did not appear to have come into immediate contact. The small interval left between them presented to the eye a broad and well-marked furrow, though of small depth, and differing little, in respect of colour and appearance, from the rest of the mucous membrane. On the external surface of the intestine, the traces of the cicatrix were not very distinctly perceived, in consequence of the adhesion of the epiploon and hernial sac. In destroying these adhesions it was impossible to avoid tearing the cicatrix, because, besides its adhesions, it was much weaker than the rest of the *parietes* of the intestines.

The fold of intestine contained within the hernial sac was formed by the commencement of the *ileum*. Neither it nor the portion of epiloon had any adhesions with the inguinal ring, which was very large. Above the seat of the hernia, the bowels were dilated; below they were much diminished in their diameter.

From a consideration of the symptoms which occurred during life, and of the appearances found after death, and a comparison of the case with that related by M. Mullot, (Case 24,) the author is disposed to believe that a portion of strangulated bowel had been separated and discharged in this case, though its discharge was not noticed at the time of its occurrence.

Mr Travers has related a case respecting which he entertained a similar suspicion. *

In the remarks which I offered in my former communication, on the mode in which the separation and discharge of a portion of the cylinder of the intestine may be effected, I regarded this occurrence exclusively as a consequence of intus-susception. On farther consideration, and particularly on a more attentive examination of the experiments by which the processes of nature in repairing injuries of the intestines have been illustrated, I am disposed to think that in some cases it may occur independently of intus-susception. "It is by no means improbable," says Mr Travers, † "that of the cases in which portions of disorganized bowel have been voided *per anum*, some have been internal herniæ, arising from malposition or laceration of the mesentery or omentum, or the production of such ligamentous bands as we sometimes find crossing old hernial sacs." To the same purpose Professor Meckel observes, (Loc. cit. ii. i. 340.) "It does not follow that, in all the cases in which parts of

* Inquiry into the Process of Nature in Repairing Injuries of the Intestines, p. 348.
† Ibidem. Note.

the intestinal canal have been detached and expelled, intus-susception must have occurred. In treating of herniæ, I shall have occasion to mention several cases in which, without intus-susception, a considerable portion of intestine separated, and still the continuity of the intestinal canal was not injured. But the same thing may happen also when, by previous inflammation, the intestinal canal has become adherent at several places to the parietes of the abdomen. In this case it is possible that parts of the canal naturally distant from one another may become adherent, and the part between them mortify and be detached without having been previously intus-suscepted and inverted." In illustration of this view Professor Meckel refers to Mr Bower's case (No. 5.) As in this case there occurred several external apertures, in the circumference of which the intestinal canal was obviously attached to the parietes of the abdomen, he thinks it possible that a portion of intestine may have come away, and the apertures between the upper and under parts of the alimentary canal been filled up, partly by coagulable lymph, and partly by the mesentery and the parietes of the *abdomen*.

The two methods by which nature may be supposed to get rid of a portion of bowel in the progress of disease, are well illustrated by what occurs in two forms of injury intentionally inflicted; 1*st*, when a ligature is simply tied round the cylinder of the gut; and 2*d*, when a knuckle of gut is included in a ligature, so as to produce its detachment, by sphacelation, from the rest of the canal.

"A ligature fastened around the intestine," says Mr Travers, "divides the interior coats of the gut, in this effect resembling the operation of a ligature upon an artery. The peritoneal tunic alone maintains its integrity. The inflammation which the ligature induces upon either side of it is terminated by the deposition of a coat of lymph exterior to the ligature, which quickly becomes organized. When the ligature thus inclosed is liberated by the ulcerative process, it falls of necessity into the canal, and passes off with its contents. It is much in this manner," continues Mr Travers, "that the disease termed *intus-susceptio*, in which one portion of the gut is enveloped and strictured by another, not unfrequently undergoes a natural cure. The adhesive inflammation preceding the separation of the disorganized part, forms a channel by which the slough is voided."

But if, instead of simply surrounding the intestinal canal by a ligature, this be applied in such a manner as to include a knuckle of intestine within the noose, there seems reason to believe that, under favourable circumstances, the portion of bowel which

loses its vitality may be discharged through the alimentary tube, just as in the cases which we have been considering.* It is obvious that in this experiment we produce a state of intestine very accurately corresponding with that of hernia, and that, in fact, in the language of Mr Travers, "what an intus-susception is in relation to the single tube, the hernia is to the fold."†

"The stricture upon a knuckle of the intestine," says that author, "operates upon the same principle as the ligature of the single tube. If it is formed within the *abdomen*, the process is more hazardous (than in the case of the single tube,) because a larger portion of dead matter requires to be enveloped, and consequently the adhesive inflammation must extend further, to prevent effusion. The walling in of the whole fold, including the strictured portion, is the first step of the process; the disengagement of the dead part by ulceration and its discharge by the canal are contentaneous with the organization of the adhesions. The villous surface presents a horizontal groove, marking the line of division. In the ordinary situation of hernia, the portions of intestine embraced by the stricture occupy a position nearly parallel. Their contiguous sides mutually adhere; in the remainder of their circumference, they adhere to the peritoneum lining or forming the stricture. The existing adhesion of the contiguous sides, strengthened by the adhesion of the parts in contact, insures a partial continuity, upon the separation of the sphacelated part. The line of separation is the line of stricture. It commences on that side of the gut which is in direct contact with the stricture. As the separation advances the opposite adhering sides may perhaps recede somewhat, and a little enlarge the angle of union. But it is ever after an angle; and where the peritoneum is deficient, the canal is simply covered in by granulations from the cellular membrane of the *parietes* coalescing with those of the external or cellular surface of the peritoneum."—P. 360.

It seems reasonable to suppose that what nature is able to accomplish in cases in which the separation of portions of the intestinal canal has been effected by experimental ligatures, she may also, and perhaps still more readily, effect when the separation is occasioned by disease, and therefore that cases of the kind which it has been the object of this and my former communication to bring together, may occur independently of intus-susception.

Of the 19 cases that I have collected, in which dissections

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* See Mr Travers's Experiments X and Y, pp. 342, 345.

† Loc. cit. p. 345.

have been made, are there any in which the *post mortem* appearances give us reason to believe that the separation of the portion of intestine had been effected independently of intus-susception? Without attempting at present to reply to this question, I beg to refer it to the consideration of the reader, whether this may not have happened in cases 23, 27, and 29.

I have now to direct attention to the considerable number of cases of Hernia and of Dysentery, in which the separation and discharge of a portion of the intestinal canal have occurred. In my former communication I gave an account of a case (24th,) in which this accident succeeded to the employment of a considerable degree of force, in the reduction of an umbilical hernia, —a case quoted by M. Cayol, the French translator of Scarpa's work upon hernia, in a "memoir on a particular termination of gangrene in cases of hernia," which he has annexed to that work. In the present communication I have noticed a case of inguinal hernia, alluded to by Soemmering, in which portions of the large intestine were discharged by stool: and I have quoted also from Cayol another case (43,) in which there appears conclusive evidence to show that a spontaneous cure was effected in a case of inguinal hernia, by the separation and discharge of a portion of bowel. It does not, I may remark, however, necessarily follow, that in cases of hernia in which a portion of bowel is discharged by stool, the separation occurred independently of intus-susception. In case 24, the appearances found after death seem to prove very clearly, that intus-susception had been the immediate cause of the separation of the portion of bowel which was discharged.

With respect to the discharge of a portion of intestine during the progress of dysentery, I quoted a case of this kind, in my former communication, from Mr Twining's Clinical Illustrations of the Diseases of Bengal, and a passage in which the author mentions having seen five cases of this sort in eight years. I referred also to some preparations of portions of intestine passed *per anum*, contained in the Museum of the Army Medical Department at Chatham, which, from their having been transmitted from India, I was inclined to suppose, might also have been the consequences of dysentery. Of one of these, I find a delineation has been published in the second fasciculus of the lithographic drawings from the preparations in that establishment, Plate VII. Fig. 9. From the account given in the present communication, of case 11, it would appear that it ought to have been considered as a dysenteric case; and to these we may add the case of MM. Sebire and Gautier (37), and one of the preparations in Meckel's Museum. (p. 380.) These cases would seem to show, that in the morbidly increas-

ed peristaltic action of the intestinal tube, which occurs in dysentery, invagination is very liable to occur.

But in admitting the occurrence of this accident in cases of dysentery, particularly when no *post mortem* examination has taken place, it is necessary to be on our guard against two sources of error. 1*st*, Portions of intestine, not comprising the whole thickness of the bowel, may be detached in the progress of this disease from the inner surface, and if a separation of this kind extends over the whole circumference of the tube, a careless observer may fail to notice in the portion discharged, the absence of the exterior coat or coats; but 2*d*, during the progress of dysentery, it not unfrequently happens that a layer of unorganizable coagulable lymph is deposited on the inner surface of the intestinal canal, and subsequently discharged by stool, resembling those layers which occasionally form on the inner surface of the larynx, trachea, and bronchi. If such layers assume a tubular form, the incautious may very readily mistake them for portions of the intestinal canal. These are occurrences, however, which it is my intention to make the subject of future communications.

I have only farther to add at present, that the cases recorded in the present communication afford several instances of an occurrence not formerly noticed, viz. the protrusion of the invaginated portion of intestine at the fundament during life. (14, 33, 37, and 40.)

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